

Site Location/Size:

The former Chlor-Alkali facility is on an approximately 4.6 acre property located on the east bank of the Androscoggin River just downstream of the Sawmill Dam in Berlin, New Hampshire.

Site History:

From the late 1800s to the 1960s, chlorine and other chemicals (caustic soda, hydrogen, chloroform) were produced using electrolytic cells in “cell houses” on the property. Diaphragm cells, and also possibly mercury cells, produced chlorine for use in the manufacture of paper at the adjacent pulp mill. Most of the onsite structures were razed and buried on site in the 1960s. In 1999, the last cell house was demolished and most of the property was capped. The property is currently vacant and owned by the bankrupt Pulp and Paper of America, LLC.

Site Contamination/Contaminants:

Residual wastes from the historical manufacture of chlorine (principally mercury, lead, dioxins, and furans) have been detected in ground water and soils onsite and in sediments of the adjacent Androscoggin River at concentrations significantly above background levels. In addition, beads of mercury can be seen seeping into the river from cracks in the bedrock at the edge of the site.

Potential Impacts on Surrounding Community/Environment:

The Androscoggin River is currently designated “catch-and-release” from Berlin downstream to the Maine border. Fishermen who disregard this designation and eat fish caught in the river could be exposed to elevated levels of mercury, which is highly toxic. Seven rare bird species are known to live or feed close to the Androscoggin River near the site and could therefore be harmed by the contaminants being released from the site; these are the bald eagle, peregrine falcon, common nighthawk, northern harrier, osprey, common loon, and Cooper’s hawk.

Response Activities (to date):

In 1999, Crown Vantage Paper Company, which then owned the site, conducted closure activities intended to isolate contamination at the site from the surrounding environment. All remaining buildings on the property were demolished, a slurry wall was constructed on two sides of the property, and an impermeable cap was constructed over most of the property. To address the mercury seeping through bedrock cracks into the Androscoggin River, grout was injected into some of the bedrock cracks and visible mercury was collected from the river and its bank. Despite these response activities, mercury continues to seep into the Androscoggin River adjacent to the site.

Between 1999 and 2004, the site owner (Pulp and Paper of America) and the New Hampshire Department of Environmental Services removed at least 135 pounds of mercury and mercury-containing sediments from the river and its bank.

[The description of the site (release) is based on information available at the time the site was evaluated with the HRS. The description may change as additional information is gathered on the sources and extent of contamination. See 56 FR 5600, February 11, 1991, or subsequent FR notices.]

For more information about the hazardous substances identified in this narrative summary, including general information regarding the effects of exposure to these substances on human health, please see the Agency for Toxic Substances and Disease Registry (ATSDR) ToxFAQs. ATSDR ToxFAQs can be found on the Internet at <http://www.atsdr.cdc.gov/toxfaq.html> or by telephone at 1-888-42-ATSDR or 1-888-422-8737.